ABSTRACT

The present invention relates to a processing unit (100) and a method for processing a plurality of data streams by an algorithm divided into a plurality of Process Steps (PS) comprising: an interconnection unit (102) comprising means for switching, Process Step (PS) means (106) comprising at least two PS modules (106a-106m), each connected to the interconnection unit (102) and a scheduler (110) connected to said interconnection unit (102) and to each PS module (106a-106m), wherein said processing unit (100) comprises: a memory unit (108) comprising at least two memories (108a-108n) wherein each memory is connected to the interconnection unit (102); the interconnection unit (102) comprising further means for at least providing a first connection between one of said memories and one of said PS modules and a second connection between another of said memories and another of said PS modules, wherein the interconnection unit (102) is adapted to connect each memory to each of the PS modules by a switching activity, wherein the switching activity and the processing of the PS modules is controlled by the scheduler (110); and each memory comprises means for storing a data stream and said data streams are manipulated in parallel by the connected PS modules respectively, during a predetermined time period between said switching activities.